

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the instant application:

Listing of Claims:

1. (Currently Amended) A gateway serving as an interface between a mobile network and a wireless network, wherein the gateway is configured to appear as an additional mobile data base station of the mobile network to a mobile switching center of the mobile network, and wherein said gateway is configured to send a heightened signal strength indicator associated with a mobile device to the mobile switching center for prompting the mobile switching center to recognize the gateway as a preferred path for handing off a call from a mobile data base station of the mobile network currently handling the call of the mobile device responsive to the mobile device transmitting a SIP invite message to the gateway informing the gateway that the mobile device will begin transmitting communication signals at reduced power to produce weakened signals to trigger a hand-off condition in the mobile switching center, wherein the gateway presents the heightened signal strength indicator with a predetermined value representing a sufficient signal strength so that the mobile switching center routes the call to the gateway responsive to receiving the SIP invite.

2. (Original) The gateway of claim 1, wherein the signal strength indicator is fabricated.

3. (Original) The gateway of claim 1, wherein the wireless network is configured according to one of the 802.11 wireless communications protocols.

4. (Previously Presented) The gateway of claim 1, wherein the gateway routes the call from the mobile switching center to a wireless access point of the wireless

network via a packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.

5. (Previously Presented) The gateway of claim 1, further comprising:

a mobile network interface comprising a transport interface configured to exchange mobile control channel signaling data with the mobile switching center and a voice channel interface configured to exchange audio data with the mobile switching center;

a mobile control and messaging component configured to communicate with the mobile switching center via said transport interface;

a call control component configured to format the mobile control channel signaling data from the mobile switching center for use over the packet-switched network;

a voice media conversion component configured to format voice data for sending using a real-time streaming protocol over the packet-switched network; and

an interface to exchange call control data and voice data with the packet-switched network.

6. (Original) The gateway of claim 5, wherein the interface to the packet-switched network is a Session Initiation Protocol interface.

7. (Currently Amended) Within a gateway interface, a method of call control between a mobile network and a wireless network comprising:

establishing, with a mobile switching center of said mobile network, a control messaging link for exchanging mobile control channel signaling data, and a voice channel link for exchanging audio data for a mobile call, wherein said gateway appears as

an additional mobile data base station of the mobile network to the mobile switching network;

establishing a communications link with a packet-switched network;

receiving a SIP invite from a mobile device over the packet-switched network indicating that the mobile device will lower a transmit signal power to produce weakened signals to trigger a hand-off from the mobile network to the wireless network;

sending a heightened signal strength indicator to the mobile data base station currently handling the mobile call responsive to receiving the SIP invite for prompting the mobile switching center to recognize the gateway as a preferred path for handing off the mobile call; and

~~establishing a communications link with a packet-switched network; and~~

routing the mobile call from said mobile data base station to a wireless access point via the packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.

8. (Original) The method of claim 7, wherein the signal strength indicator is fabricated.

9. (Original) The method of claim 7, said routing step comprising routing the mobile call to the wireless access point via the packet-switched network using Session Initiation Protocol.

10. (Original) The method of claim 7, wherein the wireless access point is an 802.11 compliant wireless access point and the wireless network is configured according to one of the 802.11 wireless communications protocols.

11. (Currently Amended) A system for call control between a mobile network and a wireless network comprising:

means for establishing, with a mobile switching center of said mobile network, a control messaging link for exchanging control signal channel signaling data and a voice channel link for exchanging audio data for a mobile call, wherein said gateway appears as an additional mobile data base station of the mobile network to the mobile switching network;

means for establishing a communications link with a packet-switched network;

means for receiving a SIP invite from a mobile device over the packet-switched network indicating that the mobile device will lower a transmit signal power to produce weakened signals to trigger a hand-off from the mobile network to the wireless network;

means for detecting the weakened signals being transmitted at a reduced power from the mobile device responsive to receiving the SIP invite;

means for sending a heightened signal strength indicator to the mobile data base station currently handling the mobile call responsive to detecting the weakened signals for prompting the mobile switching center to recognize the system as a preferred path for handing off the mobile call;

~~means for establishing a communications link with a packet-switched network;~~
and

means for routing the mobile call from said mobile data base station to a wireless access point via the packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.

12. (Original) The system of claim 11, wherein the signal strength indicator is fabricated.

13. (Original) The system of claim 11, said means for routing further comprising means for routing the mobile call to the wireless access point via the packet-switched network using Session Initiation Protocol.

14. (Original) The system of claim 11, wherein the wireless access point is an 802.11 compliant wireless access point and the wireless network is configured according to one of the 802.11 wireless communications protocols.

15. (Currently Amended) A computer-readable medium, having stored thereon a computer program having a plurality of code sections executable by a machine for causing the machine to perform the steps of:

establishing, with a mobile network switching center of said mobile network, a control messaging link for exchanging mobile control channel signaling data and a voice channel link for exchanging audio data for a mobile call, wherein said gateway appears as an additional mobile data base station of the mobile network to the mobile switching network;

establishing a communications link with a packet-switched network;

receiving a SIP invite from a mobile device over the packet-switched network indicating that the mobile device will lower a transmit signal power to produce weakened signals to trigger a hand-off from the mobile network to the wireless network;

detecting the weakened signals being transmitted at a reduced power from the mobile device responsive to receiving the SIP invite;

sending a heightened signal strength indicator to the mobile data base station currently handling the mobile call responsive to detecting the weakened signals for prompting the mobile switching center to recognize the gateway as a preferred path for handing off the mobile call;

establishing a communications link with a packet-switched network; and

routing the mobile call from said mobile data base station to a wireless access point via the packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.

16. (Previously Presented) The computer-readable medium of claim 15, wherein said signal strength indicator is fabricated.

17. (Previously Presented) The computer-readable medium of claim 15, said routing step comprising routing the mobile call to the wireless access point via the packet-switched network using Session Initiation Protocol.

18. (Previously Presented) The computer-readable medium of claim 15, wherein the wireless access point is an 802.11 compliant wireless access point and the wireless network is configured according to one of the 802.11 wireless communications protocols.

19. (Currently Amended) A method for mobile device handoff between a mobile network and a wireless network comprising:

on a mobile device, detecting a wireless access point of the wireless network;

on said mobile device, sending a SIP invite to a gateway informing the gateway that the mobile device will lower a transmit signal power to produce weakened signals to trigger a hand-off from the mobile network to the wireless network, and lowering a transmission power to a mobile data base station of said mobile network currently handling communications with said mobile device;

on said mobile network, a mobile switching center detecting a lower power signal from said mobile device and identifying at least one mobile data base station of the mobile network available to handle communication with said mobile device, wherein a gateway serving as an interface between the mobile network and the wireless network is configured to appear as an additional data base station of the mobile network; and

on a gateway associated with said wireless network, having previously received the SIP invite message informing the gateway that the mobile device will lower a transmit signal power to produce weakened signals, indicating to said mobile switching center that a heightened signal strength has been received from the mobile

communication device for prompting the mobile switching center to handoff communications with said mobile device to said gateway for providing connectivity between said mobile switching center said mobile device through said wireless access point, wherein said heightened signal strength is not indicative of actual signal strength of said mobile device.

20. (Currently Amended) The method of claim 19, further comprising
on said mobile device, sending [[an]] SIP invite through a wireless network to a SIP server;
on said gateway, forwarding said SIP invite to said SIP server via Internet; and
authenticating a SIP user agent on said mobile device.

21. (Previously Presented) The method of claim 20, further comprising:
upon authenticating said SIP user agent, setting up an internet protocol (IP) streaming session between said gateway and mobile device;
switching over from said mobile data base station currently handling communications with said mobile device to said gateway; and
tearing down communications between said mobile network and said mobile device, for handing off said mobile device from a mobile network to a wireless network.